

## Office Action Summary

Application No.

10/584,901

Applicant(s)

SCHERER ET AL.

Examiner

WILLIAM E. TAPOLCAI

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22,24-29,31,32 and 34-43 is/are pending in the application.
- 4a) Of the above claim(s) 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22,24-29,31,32 and 34-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>20100216</u> .                           |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                           |

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1. The Office action of November 16, 2009 is hereby vacated to correct an error of not addressing new claim.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22, 24-29, 31, 32, and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,513,500 to Fischer et al in view of U.S. Patent No. 4,487,028 to Foye and U.S. Patent No. 3,216,215 to Schuett. Fischer et al discloses the claimed invention of a cooling system for an aircraft including a refrigeration installation 4, a refrigeration consumer 8A and 8B, and a refrigeration transport system 5-7 and 10-12 connecting the refrigeration installation and the refrigeration consumer. However, Fischer et al does not disclose the refrigeration installation as comprising two refrigeration machines operating independently of each other and in parallel, or the bypass pipe having a shut-off valve for bypassing the refrigerating consumer. Foye teaches an air conditioning system which includes two refrigeration machines 11 and 12 which cool a secondary fluid. Column 3, lines 45-48 teach that the refrigeration machines 11 and 12 operate independently of each other and in parallel. Thus, it would be obvious to provide Fischer et al with two refrigeration machines that operate independently of each other and in parallel, in view of Foye, to yield the predictable result of providing redundant systems in case one system fails. Schuett teaches a a refrigeration apparatus comprising a refrigeration installation 6-9, at

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least one consumer (the incubator hatcher #3 and #4), and a refrigeration transport system 11-16 for connecting the refrigeration installation and the consumers. The transport system includes a conveying pipe 13 that has a valve 13a for bypassing the consumers. The valve 13a is considered to inherently function as a shutoff valve.

Alternatively, one of ordinary skill in the art would be able to place a shutoff valve in the bypass line. Thus, it would be obvious to provide Fischer et al with a bypass line and shutoff valve, in view of Schuett, to yield the predictable result of bypassing the refrigeration consumers when refrigeration is not needed. With regards to claims 28 and 41, Schuett also teaches a refrigeration system comprising a store 12a for the secondary refrigerant. Thus, it would be obvious to provide Fischer et al with a store for the secondary refrigerant, in view of Schuett, to yield the predictable result of providing the necessary amount of coolant needed to perform the cooling functions required.

4. Applicant's arguments filed October 14, 2009 have been fully considered but they are not persuasive. Schuett is considered to teach the newly cited bypass line and shutoff valve. Alternatively, one of ordinary skill in the art would be able to provide the bypass line with a shutoff valve in order to control the use of the bypass line.

5. Newly submitted claim 43 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 43 is drawn to a method of operating two duplicate refrigeration machines for an average equal amount of time. This invention is separate and distinct from independent claim 22 of the originally filed invention in that this method could be operated by an apparatus that is materially different from the method, for example, because claim 22 recites the

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refrigeration consumer with a refrigerating and circulating agent via a shut-off valve and a pump.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 43 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM E. TAPOLCAI whose telephone number is (571)272-4814. The examiner can normally be reached on Monday-Thursday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on (571)272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/WILLIAM E. TAPOLCAI/  
Primary Examiner, Art Unit 3744

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February 16, 2010